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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,652	01/06/2006	Johannes Nicolaas Huiberts	NL030804	1919

24737 7590 04/27/2007

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
ELLIS, SUEZU Y	
ART UNIT	PAPER NUMBER
2878	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,652	HUIBERTS ET AL.	
	Examiner	Art Unit	
	Suezu Ellis	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-10* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/6/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed at the European Patent Office on July 10, 2003. Although applicant submitted a translation of the 03102087.8 application, it is noted, however, that applicant has not filed a certified copy of the 03102087.8 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

The information disclosure statement filed January 6, 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

Claims 1, 5 and 7 are objected to because of the following informalities:

In claim 1, lines 6 and 7, claim language recites "said organic diode". Claim language should recite "said at least one organic diode" for consistency with that in claim 1, line 1.

In claim 5, line 4, claim language recites "said organic diode". Claim language should recite "said at least one organic diode" for consistency with that in claim 1, line 1.

In claim 7, line 2, claim language recites "said organic diode". Claim language should recite "said at least one organic diode" for consistency with that in claim 1, line 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huiberts et al. (WO 03054980) in view of Chen (US 5,869,857). Hereinafter, Huiberts et al. will be referred to as Huiberts.

With respect to claims 1-3 and 6-10, Huiberts discloses an organic electroluminescent display comprising at least one organic diode wherein the electric device comprises a driving means for driving the at least one organic diode alternately in a light emission state and in a light sensing state (pg. 3, lines 30-34). Huiberts further discloses the at least one organic diode is driven in the light sensing state by a voltage having a value of substantially 0V (pg. 3, line 34 - pg. 4, line 2; pg. 6, lines 29-30). Huiberts fails to expressly disclose a pre-pulse means for applying one or more electric

pulses to the at least one organic diode prior to driving the organic diode in the light sensing state. Huiberts and Chen are directed to a similar field of endeavor of photodetectors. Chen discloses a pre-pulse means (M_3) for applying one or more positive electric pulses to a photodiode prior to driving the photodiode (Fig. 7). Chen also discloses the electric pulse has a value close to that of the built-in voltage (V_{bias}) of the organic diode (col. 8, lines 33-36). It would have been obvious to a person of ordinary skill in the art to include a pre-pulse means for applying one or more electric pulses (precharge voltage) to the organic diode prior to driving it in the light sensing state in order to set the photodiode in reverse-biased condition for photocharge integration (col. 8, lines 36-43).

Claims 1-4, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huiberts in view of Scott-Thomas (US 7,019,277).

With respect to claim 1-3, 6, 8 and 9, Huiberts discloses an organic electroluminescent display comprising at least one organic diode wherein the electric device comprises a driving means for driving the at least one organic diode alternately in a light emission state and in a light sensing state (pg. 3, lines 30-34). Huiberts further discloses the at least one organic diode is driven in the light sensing state by a voltage having a value of substantially 0V (pg. 3, line 34 - pg. 4, line 2; pg. 6, lines 29-30). Huiberts fails to expressly disclose a pre-pulse means for applying one or more electric pulses to the at least one organic diode prior to driving the organic diode in the light sensing state. Huiberts and Scott-Thomas are directed to a similar field of endeavor of

diodes. Scott-Thomas discloses a pre-pulse means (485) for applying one or more positive electric pulses (precharge voltage) to a diode prior to driving the diode in light sensing state (Fig. 5). Scott-Thomas further discloses for a 3.3V imaging device power supply voltage V_{DD}, an approximately 2.0 V precharge voltage is sufficient, which is close to that of the build-in voltage (V_{DD}). It would have been obvious to a person of ordinary skill in the art to include a pre-pulse means for applying one or more electric pulses (precharge voltage) to the organic diode prior to driving it in the light sensing state in order to reduce banding effect.

With respect to claim 4, the modified Huiberts fails to expressly disclose the electric pulse being a negative electric pulse, however, Scott-Thomas discloses the electric pulse (precharge voltage) may vary for different imaging devices depending on the voltage of the voltage supply of the imaging device. Scott-Thomas further discloses the electric pulse (precharge voltage) would normally be less than the imaging device voltage supply voltage and can be determined by one skilled in the art (col. 6, lines 26-41). It would be an obvious to a person of ordinary skill in the art to modify the electric pulse to be negative since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Allowable Subject Matter

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 5, prior art fails to teach or reasonably suggest, either singly or in combination, an electric device comprising at least one organic diode comprising a pre-pulse means that applies a positive electric pulse and a subsequent negative electric pulse prior to driving the organic diode in the light sensing state, in addition to the other limitations of the claim.

Telephone/Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suezu Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

THANH X. LUU
PRIMARY EXAMINER